

PART A

Format for Micro-Project Proposal

Title of the Microproject: File-share Website

1.0 Brief Introduction

Welcome to our micro project, the Fileshare website! Our platform is designed to streamline the process of sharing files seamlessly. Leveraging cutting-edge technologies such as React, Express, and MongoDB, we've crafted an intuitive solution that simplifies file sharing like never before.

Powered by the robust React framework on the frontend and the versatile Express framework on the backend, Fileshare provides users with a seamless and efficient experience. With MongoDB handling our data storage needs, we ensure reliability and scalability for all file sharing activities.

At Fileshare, simply select the file you wish to share, and our platform will generate a downloadable link for effortless sharing. Whether you're collaborating on projects, distributing documents, or simply exchanging files with friends and colleagues, Fileshare empowers you to do so with ease.

2.0 Aim of the Micro-Project

1. Simplify file sharing among college students and faculty.
2. Efficiently manage shared files for easy retrieval.
3. Instantly generate download links for shared files.
4. Foster collaboration among college members.
5. Ensure privacy and security of user data.
6. Gain practical experience in web development and project management.

3.0 Action Plan

S.N .	Details of activity	Planned start date	Planned Finish date	I. Code & Name of Team Members
1	Collecting information about App.	09-11-23	10-11-23	21IF004 – Snehal Anil Agrawal 21IF035 – Tanuj Avinash Keshattiwar
2	Collecting all necessary Template and Creating Part A.	11-11-23	14/11/23	21IF063 – Atharva Sunil Wankhade 21IF004 – Snehal Anil Agrawal
3	Designing and Developing Project.	11-11-23	17/11/23	22IF201 – Adnan Ahmad Rizwan Ahmad 21IF035 -Tanuj Avinash Keshattiwar
4	Preparation of Part B and Testing Project.	17-11-23	18/11/23	22IF201 – Adnan Ahmad Rizwan Ahmad 21IF035 -Tanuj Avinash Keshattiwar
5	Preparation of Report	19/11/2023	19/11/23	21IF036 – Prasad Vilas Khapli

4.0 Resources Used

Sr. No.	Name of The Resource	Specifications	Qty	Remarks
1.	PC/Laptop	4 GB RAM Minimum	1	
2.	DataBase	MongoDB	1	
3.	Node.js/ react.js/express.js	v2024	1	
4.	Visual Studio Code	v1.84	1	

5.0 Skill Developed /Learning outcome of this Micro-Project:

- ❖ Using Resource Efficiently to collect information.
- ❖ Effective communication and presentation skills
- ❖ Leadership, Teamwork
- ❖ Website development

Guideline for Assessment of Micro-Project Evaluation as per suggested Rubric for Assessment of Micro-Project.

Assessment Parameter	Characteristic to be assessed	Average (1 mark)	Good (1.5 mark)	Excellent (2 mark)
Process Assessment (06)	Relevance of the courses & proposals			
	Literature survey/market survey/information collection			
	Analysis of data & completion of the target as per proposal/			
Product Assessment (04)	Report Preparation/Quality of Prototype/model			
	Report Preparation/Quality of Prototype/model			

PART B

Format for Micro-Project Report

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3.0 Course Outcome Integrated

1. Create interactive web page using regular expression for validation.
2. Create menus and navigations in web pages

4.0 Actual Procedure Followed

First all members discussed the topic then 21IF004 & 21IF035 has collected the information about the topic then we all members divided our project code between all the members and once the code is completed then it's a time for report preparing. We divided our report parts among every one and then prepared it and as a finishing touch that is rechecking was done by 21IF063 and 22IF201.

Steps:

1. First we discussed in a group about Microproject
2. We Distribute work among all five members.
3. We choose VS code making perfect code .
4. Then we checked that our code gives us right Output or not.
5. With the help of team member we created sufficient code for our Project.
6. Then we have created our reports.

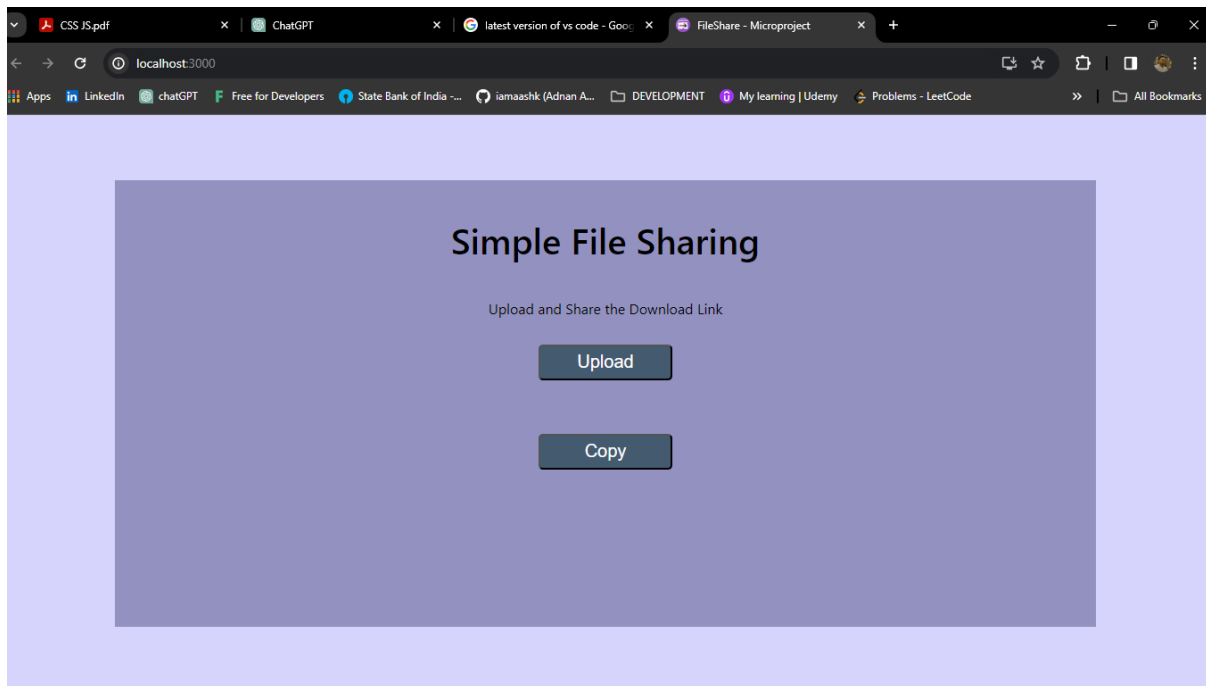
S.N.	Details of activity	Planned start date	Planned Finish date	I. Code & Name of Team Members	REMARK
1.	Collecting information about Game.	02/03/2024	06/03/2024	21IF004 – Snehal Anil Agrawal 21IF035 – Tanuj Avinash Keshattiwar	Completed Early
2.	Collecting all necessary Template and Creating Part A.	08/03/2024	11/03/2024	21IF063 – Atharva Sunil Wankhade 21IF004 – Snehal Anil Agrawal	On Time
3.	Designing and Developing Project.	13/03/2024	26/03/2024	21IF035 – Tanuj Avinash Keshattiwar 22IF201 – Adnan Ahmad Rizwan Ahmad	Completed With in Time
4.	Preparation of Part B and Testing Project.	27/03/2024	31/03/2024	22IF201 – Adnan Ahmad Rizwan Ahmad	Completed Early
5.	Preparation of Report	01/04/2023	03/03/2024	21IF036 – Prasad Vilas Khapli	On Time

5.0 Actual Resources used

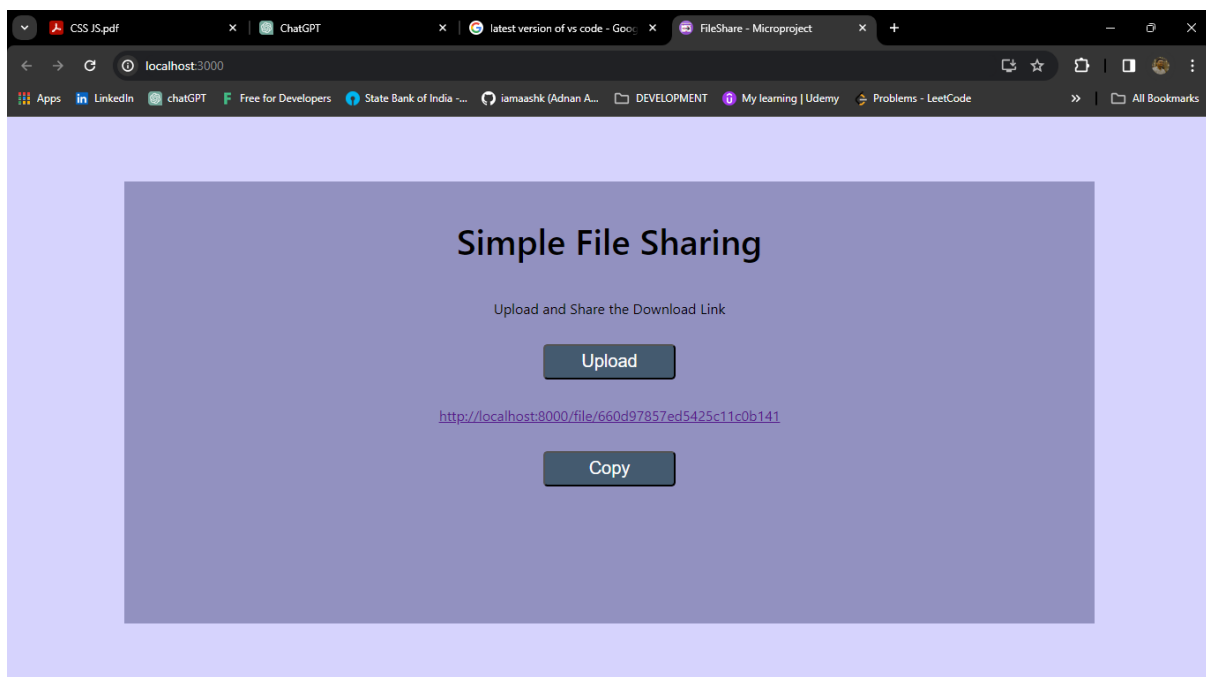
Sr. No.	Name of The Resource	Specifications	Qty	Remarks
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4.	Visual Studio Code	v1.84	1	

6.0 Outputs of the Micro-Projects

Website before uploading file.



Website after generating Link.



7.0 Skill Developed /Learning outcome of this Micro-Project:

- ❖ Using Resource Efficiently to collect information.
- ❖ Proficiency in data collection and analysis.
- ❖ Effective communication and presentation skills
- ❖ Leadership, Teamwork
- ❖ Website Development

Signature of Student

Tanuj A. Keshattiwar	(21IF035)
Atharva S. Wankhade	(21IF063)
Snehal A. Agrawal	(21IF004)
Adnan Ahmad	(22IF201)
Prasad V. Khapli	(21IF036)

8.0 Assessment by Faculty as per Rubrics

Process Assessment (06)	Product Assessment (04)	Total Marks (10)	Signature of Faculty

PROGRAM:

Client Side:

Index.html:

```

<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <link rel="icon" href="%PUBLIC_URL%/spring-break.ico" />
    <meta name="viewport" content="width=device-width, initial-scale=1" />
    <meta name="theme-color" content="#000000" />
    <meta
      name="description"
      content="Web site created using create-react-app"
    />
    <link rel="apple-touch-icon" href="%PUBLIC_URL%/logo192.png" />

    <link rel="manifest" href="%PUBLIC_URL%/manifest.json" />

    <title>FileShare - Microproject</title>
  </head>
  <body>
    <noscript>You need to enable JavaScript to run this app.</noscript>
    <div id="root"></div>

  </body>
</html>

```

Api.js:

```

import axios from 'axios';
const API_URL = `http://localhost:8000`;
export const uploadFile = async (data) => {
  try {
    let response = await axios.post(`${API_URL}/upload`, data);
    return response.data;
  } catch (error) {
    console.error('Error while calling api', error.message);
    throw error;
  }
}

```

App.js:

```

import { uploadFile } from './services/api';
import './App.css';
import { useRef, useState, useEffect } from 'react';
function App() {
  const [file, setFile] = useState('');
  const [result, setResult] = useState('');
  const fileInputRef = useRef();
  useEffect(() => {
    const getImage = async () => {
      if (file) {
        const data = new FormData();
        data.append("name", file.name);
        data.append("file", file);
        let response = await uploadFile(data);
        setResult(response.path);
      }
    }
    getImage();
  }, [file])

  const onUploadClick = () => {
    fileInputRef.current.click(); //to open file choosing window
  }

  const onCopyClick = () => {
    if (navigator && navigator.clipboard && navigator.clipboard.writeText)
      return navigator.clipboard.writeText(result);
  }

  console.log(file);
  return (
    <div className = "container">

      <div className='wrapper'>
        <h1>Simple File Sharing</h1>
        Upload and Share the Download Link

        <button onClick={() => onUploadClick()}>Upload</button>
        <input type="file"

```

```

        ref={fileInputRef}
        style={ {display: 'none'}}
        onChange={(e) => setFile(e.target.files[0])}
      />
      <a href={result} target = "_blank" rel="noreferrer">{result}</a>

      <button onClick={()=>onCopyClick()}>Copy</button>

    </div>
  </div>
);
}
export default App;

```

index.js:

```

import React from 'react';
import ReactDOM from 'react-dom/client';
import './index.css';
import App from './App';
import reportWebVitals from './reportWebVitals';

const root = ReactDOM.createRoot(document.getElementById('root'));
root.render(
  <React.StrictMode>
    <App />
  </React.StrictMode>
);

reportWebVitals();

```

Server Side:

Controler.js

```
import File from "../models/file.js";
export const uploadImage = async (request, response)=>{
  const fileObj={
    path: request.file.path,
    name: request.file.originalname
  }
  try {
    const file = await File.create(fileObj);
    response.status(200).json({path:`http://localhost:8000/file/${file._id}`});

  } catch (error) {
    console.error(error.message);
    response.status(500).json({error: error.message});
  }
}

export const downloadImage = async (request, response)=>{
  try {
    const file= await File.findById(request.params.fileId);
    file.downloadContent++;
    await file.save();
    response.download(file.path, file.name);
  } catch (error) {
    console.error(error.message);
    return response.status(500).json({ error: error.message });
  }
}
```

Db.js

```
import mongoose from "mongoose";
const MONGODB_URL
=`mongodb+srv://adnan:adnan@fileshare.qkpw6o.mongodb.net/?retryWrites=true&w=majority&appName=fileshare`;
const DBConnection = async ()=>{
  try {
    const config = {
      autoIndex: false,
```

```
        useNewUrlParser: true,  
    };  
    console.log("Database is connected");  
    return mongoose.connect(MONGODB_URL, {config});  
} catch (error) {  
    console.error('Error while connecting to database',error.message);  
}  
}  
export default DBConnection;
```

```
import mongoose from "mongoose";
```

file.js:

```
const fileSchema = new mongoose.Schema({  
    path:{  
        type: String,  
        required: true  
    },  
    name:{  
        type: String,  
        required: true  
    },  
    downloadContent:{  
        type: String,  
        required: true,  
        default: 0  
    }  
})  
const File =mongoose.model('file', fileSchema);  
export default File;
```

Routes.js:

```
import express from 'express';
import { uploadImage, downloadImage } from '../controller/image-controller.js';
import upload from '../utils/upload.js';
const router = express.Router();
router.post('/upload',upload.single('file'), uploadImage);
router.get('/file/:fileId', downloadImage);
export default router;
```

upload.js:

```
import multer from "multer";
const upload = multer({dest: 'uploads'});
export default upload;
```

Conclusion:

In conclusion, our Fileshare website represents the culmination of innovative development using frameworks like React, Express, and MongoDB. By harnessing the power of these technologies, we've created a platform that simplifies file sharing and enhances collaboration.

As we move forward, we remain committed to refining and improving Fileshare to meet the evolving needs of our users. Whether it's optimizing performance, enhancing security measures, or introducing new features, we're dedicated to providing an exceptional file sharing experience.

We invite you to continue exploring Fileshare and discovering the convenience it offers for all your file sharing needs. Thank you for joining us on this journey as we strive to make sharing files easier, faster, and more efficient for everyone.